### Green Ribbon Science Panel

### **Topic #1 --- Alternatives Assessments (as described in AB 1879)**

#### INTRODUCTION:

AB 1879 (Health and Safety Code (HSC) section 25253) requires DTSC to adopt regulations that establish a process for evaluating chemicals of concern in consumer products, and their potential alternatives, to determine how best to limit exposure or to reduce the level of hazard posed by a chemical of concern. The statute further requires that this process include an evaluation of the availability of potential alternatives and potential hazards posed by those alternatives, as well as an evaluation of critical exposure pathways. The alternatives assessment (AA) process is required to include life cycle assessment tools that (at a minimum) take into consideration all of the following:

- (A) Product function or performance
- (B) Useful life
- (C) Materials and resource consumption
- (D) Water conservation
- (E) Water quality impacts
- (F) Air emissions
- (G) Production, in-use, and transportation energy inputs
- (H) Energy efficiency
- (I) Greenhouse gas emissions
- (J) Waste and end-of-life disposal
- (K) Public health impacts, including potential impacts to sensitive subpopulations, including infants and children
- (L) Environmental impacts
- (M) Economic impacts

#### LIST OF ATTACHMENTS:

- **1-1** Statutory (AB 1879) Requirements for Alternatives Assessments (HSC section 25253)
- **1-2** Alternatives Assessments (excerpts from Draft Regulations, November 2010)
- **1-3** "Alternatives Assessment for Chemicals: From Problem-Evaluation to Solutions Assessment and Implementation" (Background paper for March 31 April 1, 2011 Interagency Discussion on Alternatives Assessment, 3/24/2011)
- **1-4** "Alternatives Assessment Framework" (Lowell Center for Sustainable Production, July 2006)
- **1-5** Excerpts from "Five Chemicals Alternatives Assessment Study" (*Toxics Use Reduction Institute, University of Massachusetts, June 2006*)

  For complete study report go to: www.turi.org/library/turi\_publications/five\_chemicals\_study
- **1-6** "Guidance on the Preparation of an Application for Authorisation" (ECHA-11-G-01, January 2011), and "Guidance for the Preparation of an Annex XV Dossier for Restrictions" (ECHA. June 2007)
  - SEE INTRODUCTORY MEMORANDUM FROM GRSP MEMBER TIMOTHY MALLOY WHICH IDENTIFIES THE MOST RELEVANT SECTIONS OF EACH DOCUMENT.

## <u>Question #1A:</u> What basic requirements should be set out in the regulations to ensure that AAs meet the requirements of HSC section 25253?

- (i) Should there be minimum requirements for the content of an acceptable AA? If so, what should they be?
- (ii) Should there be minimum requirements for the process (the steps or procedures) for an AA evaluation? If so, what should they be?
- (iii) What criteria should be used in pre-screening potential alternatives for inclusion in an AA? How should the term "availability of potential alternatives" be defined?
- (iv) Should there be guidance or requirements for considering cost and performance factors in determining potential alternatives?

<u>Question #1B:</u> What basic requirements (if any) should be set out for meeting the life cycle requirements of HSC section 25253? Should these requirements be satisfied by "life cycle thinking", life cycle inventories, or more full blown life cycle analyses?

# <u>Question #1C:</u> Should / how should the 13 elements specified in HSC section 25253 for AA evaluations be grouped and/or sequenced (or should this be left entirely to the discretion of the entity performing the AA)?

- (i) For example, should the AA be staged so as to screen out alternatives as the AA progresses from one stage to the next (see *Attachment 1-2*)?
- (ii) Elements (A) and (B) are properties of an alternative, whereas, elements (C) through (M) are impacts of an alternative. Should the first two elements be used to screen out alternatives before, after or simultaneously with consideration of the other elements?

# <u>Question #1D:</u> What data or other information should be required to be obtained or developed and evaluated to support the AA analysis?

(i) Should there be minimum requirements for documentation data for each of the 13 elements specified in HSC section for an AA? If so, what should those requirements be?

**Question #1E:** What is a reasonable timeframe to allow for completion of an AA evaluation meeting the requirements of HSC section 25253?

### **Question #1F:** Other related ideas?

See Attachments 1-3, 1-4, 1-5 and 1-6 for information on alternatives assessment approaches developed and used by other states, the Lowell Center for Sustainable Production, the Toxics Use Reduction Institute (University of Massachusetts Lowell), and the European Chemicals Agency (ECHA).